

Amendments to the Specification

An amendment of the written description is presented under the heading "Amendment to the Specification."

Amendments to the Claims

The claims are amended as shown on the following pages under the heading LIST OF CURRENT CLAIMS. The list shows the status of all claims presently in the application including any current amendments. This list of claims is intended to supersede all prior versions of the claims in the application. Any cancellation of claims is made without prejudice or disclaimer.

AMENDMENTS TO THE SPECIFICATION

The title has been amended to read:

~~Temperature Sensor Temperature Sensing Tube and Its Fabrication Method~~

A Method Of Fabricating A Temperature Sensing Tube

Page 5, paragraph 5 has been amended to read:

~~A~~ A tube member 5 that includes a head section 4 having an outer conoidal hem 41 and an inner conoidal hem 42 formed along the circumference at its lower extent, wherein the inner conoidal hem 42 is fashioned by acutely bending the upper circumferential edge of the outer conoidal hem 41 into a U-shape such that it overlaps against the outer conoidal hem 41; wherein, a neck section 44 is formed at the bottom section 43 and center of the conoidal hem 42 that includes a gradually reduced neck base 441 which is larger than and formed upward from the bottom section 43 and continues extending above into a neck body 442 having an approximately equal tubular diameter, a passage 45 is disposed in the neck section 44, ~~the~~ said passage 45 including a hole section 451 of a nominally constant inner diameter that matches the neck body 442 and a conic hole section 452 of graduated reduction from the bottom towards the top that matches the neck base 441.

Page 6, the first full paragraph has been amended to read:

~~A~~ The tube member 5 ~~having~~ has a hollow interior section that is contiguous with the said passage 45 and a hole mount 51 formed inward at the bottom section, with an aperture 511 disposed in the hole mount 51.

Page 6, paragraphs 4 and 5 has been amended to read:

The ~~said~~ carrier mount 6 has external threads 61 and a seat 62 as well as a receiving recess 64 inside tapped with internal threads 63; an opening 65 is formed in the receiving recess 64 and a conoidal guide edge 66 is disposed between the receiving recess 64 and the opening 65.

The ~~said~~ threaded pin component 7 has a turning section 71 and external threads 72, with a bore 73 formed inside; the end portion of the threaded pin component 7 is shaped such that it has a flat bottom section 74 and a beveled edge 75.

Page 8, paragraphs 2 and 3 have been amended to read:

A first step, referring to FIG. 5, that provides for a ~~tubular blank~~ blank tubular member 8 of an appropriate length.

A second step, referring to FIG. 6, in which the tubular ~~blank~~ member 8 formed in the previous step is moved between a female die 81 having a die cavity 811 and a curved bottom edge 812 and a punching rod 815 having a thin lengthy rod section 813 and a curved front end section 814 for impact forging to thereby form a ~~curvilinear~~ first semifinished product 816 of the tube member 5 having a curvilinear bottom end 817 defining a bottom section aperture 511 shown in FIG. 3.

Page 9, paragraphs 1, 2 and 3 have been amended to read:

A third step, referring to FIG. 7, in which the tubular member 8, formed into the first semifinished product 816 of the previous step, is moved between a female die 82 having a die cavity 821 and a curved bottom edge 822 and a punching die 825 having a channel 823 and a suitably long flared hole section 824 at its front end for impact forging to thereby form the second semifinished product 826 of the neck base 441 and the neck

body 442 shown in FIG. 3; wherein, the depth of the female die 82 die cavity 821 is less shallow than that of the first step female die 81 die cavity 811.

A fourth step, referring to FIG. 8, in which the tubular member 8, formed into the second semifinished product 826 of the previous step₁ is moved between a female die 83 having a die cavity 831 and a curved bottom edge 832 and a punching die 835 having a channel 833 and a suitably long flared hole section 834 at its front end for impact forging to thereby form the third semifinished product 836 of the neck base 441 and the neck body 442 shown in FIG. 3; wherein, the punching die 835 flared hole 834 is closer to the finished product dimensions than that of the previous step.

A fifth step, referring to FIG. 9, in which the tubular member 8, formed into the third semifinished product 836 of the previous step₁ is moved between a female die 84 having a die cavity 841 and a circular groove-shaped bottom edge 842 and a punching die 845 having a channel 843 and a suitably long flared hole section 844 at its front end for impact forging to thereby form the fourth semifinished product 846 of the tube member 5 having a hole mount 51 surrounding the bottom section aperture 511 as shown in FIG. 3.

Page 10, paragraphs 1 and 2 have been amended to read:

A sixth step, referring to FIG. 10, in which the tubular member 8, formed into the fourth semifinished product 846 of the previous step₁ is moved between a female die 85 having a die cavity 851, a circular groove-shaped bottom edge 852, and a flared opening 853 and a punching die 857 having a channel 854, a suitably long flared hole section 855 at its front end, and a conical edge 856 for impact forging to form the finished product 858 having the outer conoidal hem 41 and the inner conoidal hem 42 shown in FIG. 3.

In the preferred embodiment of the invention herein, the fourth and the fifth steps can be combined, wherein the fourth step female die 83 and the fifth step female die 84 are alternated such that during the fourth step, in addition to forging the neck base 441 and the neck body 442 into predetermined product dimensions, the tube member 5 bottom section aperture ~~51~~ 511 is formed and completed at the same time.